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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,972	01/20/2004	Lewis R. Dove	10020702-1	4019

7590 05/10/2005

AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
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LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

10/761972



UNITED STATES DEPARTMENT OF COMMERCE  
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ART UNIT

A 576

- ☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), \_\_\_\_\_ days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.      | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-20 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 1-7; 8-12; 13-16, 18 are rejected.

5. ☐ Claims 19, 20 are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_ Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_ has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

The disclosure is objected to because of the following informalities: Page 1, paragraph (0001), note that updated status information for the related applications should be provided. Page 4, paragraph (0015), note that is shielded 106, 108, "appears to be an incomplete recitation. Page 6, paragraph (0021), note that "FIGS. 2 and 3" should properly be – Fig. 3 – for consistency with "dielectrics 206, 208, 214"; note that "the substrate 224" should be rephrased as <sup>--As</sup> shown in FIGS. 2 and 3, the substrate 224 – for a proper characterization. Pages 6, 7, 8, paragraphs (0022), and (0024), note that – by step – should precede (402, 404, 408, 410, 412, 414, 416, 702, 704, 706, 710, 712, 714, 716), respectively. Page 7, paragraph (0022), note that "dielectric 508" does not appear consistent with the labeling in fig. 6 .

Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that for the following sequence of reference numbers, the respective sequence should be rewritten to indicate each number of the corresponding sequence (e.g. 200-204 should be – 200, 202, 204 --, etc): (200-204), (218-222); (500-506). Moreover, the following reference labels need description relative to the corresponding drawing figure: figs. 5, 6 (200, 204, 224); Fig. 6 (202, 218, 220); figs. 8, 9 (218, 224); fig. 9 (200, 202, 204, 800, 802, 810, 812, 904, 906).

Appropriate correction is required.

The drawings are objected to because of the following In fig. 3, should "228" properly be – 224 --? In Figs. 5, 6, for the leftside transmission line, should a reference label – 220 – be added to the rightside of the shield? Corrected drawing sheets in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The use of the trademark Dupont QG 150 [page 6, paragraph (0021)] has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims 4-7, 8-12, 14-16, 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 4, 5, 7, 9, 10, 12, 14, 15, 18, note that it is unclear which ones of the various recited dielectrics is intended by the recitation of the dielectrics.

In claim 8, note that the first and second dielectrics is vague and indefinite as to whether which dielectric mounds (i.e., upper lower both, etc) is/are intended.

The following claims have been found objectionable for reasons set forth below:

In claim 13, at (e), (f), note that --, respectively -- should follow dielectric for a proper characterization.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by either Leeb or Matsubayashi et al.

Note that each reference discloses first and second dielectric mounds (1, 5 in Leeb; 10a, 10c in Matsubayashi et al) encapsulating first and second signal conductors (2 in Leeb; 3 in Matsubayashi et al). A third dielectric mound (1, 5 in Fig. 10 of Leeb; 10b in Matsubayashi et al) which encapsulates a signal conductor (3 in Matsubayashi et al; 2 in fig. 10, of Leeb) and which is disposed in a valley adjacent to the first and second dielectric mounds. A first ground plane (2 in Matsubayashi et al; 6 in Leeb) and

a second ground plane (8 in Leeb; 4, 6 in Matsubayashi et al) is disposed about each of the first, second and third dielectrics.

Claims 8, 12; 13, 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Leeb.

Note that in Leeb, each of the first, second and third dielectric mounds comprise upper and lower dielectric mounds (1, 5) which, being deposited one on top of the other, inherently characterizes a thick film construction.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leeb or Matsubayashi et al in view of Dove et al ('979), cited by applicant's.

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Each primary reference dissos the claimed invention except for the dielectric mounds being comprised of KQ dielectric material.

Dove et al discloses that the use of KQ dielectrics especially in shielded coaxial multi-layer structures is conventional in the art.

Accordingly, in view of the recognized teaching in Dove et al, it would have been obvious to have modified the dielectric mounds of either primary reference to have been KQ dielectric material, especially in view of their conventional use in shielded coaxial multi-layer structures such as in either primary reference.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (571)272-1764.

Lee/ds

05/02/05



**Benny T. Lee**  
**Primary Examiner**